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09/616,330	07/15/2000	David Stanton	72949/0269498 0269498	8440

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EXAMINER

PHAN, TAM T

ART UNIT PAPER NUMBER

2144

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/616,330	STANTON ET AL.	
	Examiner	Art Unit	
	Tam (Jenny) Phan	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This application has been examined. Amendment received on 10/14/2004 has been entered. Claims 1-12 are cancelled. Claim 13 is currently amended. Claims 21-36 are newly added.

2. Claims 13-36 are presented for examination.

Priority

3. No priority claims have been made.

4. The effective filing date for the subject matter defined in the pending claims in this application is 07/15/2000.

Drawings

5. This application has been filed with informal drawings, which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar et al. (U.S. Patent Number 6,542,515), hereinafter referred to as Kumar, in view of Box et al. (Simple Object Access Protocol (SOAP) 1.1; May 2000).

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8. Kumar disclosed a messaging platform for a component-based software system, the platform comprising: a connection assembler for at least one of creating, managing and manipulating a first messaging platform connection; a protocol management framework for implementation of a predetermined transport protocol over the first connection; a schema generator for responsive to a request for service received over a second messaging platform connection, creating a document according to a predetermined format, the document containing information to be provided to another system over the first connection; and a translation component for encoding a document in the predetermined format into a second encoded object that can be understood and used by the another system, the second encoded object being encoded according to an encoding protocol different from the default encoding protocol (Figures 2-3 and 7-8, column 4 lines 4-19, column 5 lines 33-38, column 7 line 43-column 8 line 15, column 9 line 4-24, column 11 line 29-51, column 14 lines 28-50, column 15 lines 21-35, column 17 line 62-17).

9. Kumar taught the invention substantially as claimed. However, Kumar did not expressly teach an encoding component for converting a document in the predetermined format into a first encoded object that can be understood and used by another system, the first encoded object being encoded according to a default encoding protocol.

10. Kumar suggested exploration of art and/or provided a reason to modify the messaging platform with the encoding component for converting a document in the predetermined format into a first encoded object that can be understood and used by

the another system, the first encoded object being encoded according to a default encoding protocol (column 3 lines 53-63, column 7 lines 43-58, column 14 lines 28-50).

11. Box disclosed an encoding component for converting a document in the predetermined format into a first encoded object that can be understood and used by another system, the first encoded object being encoded according to a default encoding protocol (Abstract, Section 1. Introduction, Section 3. Relation to XML, Section 5. SOAP Encoding, Section 6. Using SOAP in HTTP).

12. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the messaging platform of Kumar with the teachings of Box in order to exchange information in a decentralized, distributed environment (Box, Abstract) since default protocol such as SOAP defines a simple mechanism for expressing application semantics by providing a modular packaging model and encoding mechanisms for encoding data within modules (Box, Section 1. Introduction).

13. Regarding claim 14, Kumar disclosed a platform wherein the information is provided by a service component; and the request for service is in a form not understandable by the service component (Abstract, column 14 lines 28-50, column 17 line 62-column 18 line 16).

14. Regarding claim 15, Kumar and Box disclosed a platform wherein the service request is in a platform and application-independent format (Kumar, column 5 lines 33-38; Box; Abstract).

15. Regarding claim 16, Kumar and Box disclosed a platform wherein the service request is in an Extensible Markup Language format (Kumar, Figures 7-8, column 7

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lines 43-58, column 14 lines 28-50; Box, Section 1. Introduction, Section 3. Relation to XML).

16. Regarding claim 17, Kumar disclosed a platform further comprising a lookup service for determining a service component to handle the service request (Abstract, Figures 2-3 and 7-8, column 4 lines 4-19, column 7 lines 43-58, column 15 lines 21-35).

17. Regarding claim 18, Kumar disclosed a platform wherein the lookup service determines the service component to handle the service request based on information associated with the service component (Abstract, Figures 2-3 and 7-8, column 4 lines 4-19, column 7 lines 43-58, column 15 lines 21-35, column 17 line 62-column 18 line 16).

18. Regarding claim 19, Kumar and Box disclosed a platform wherein the protocol management framework implements HTTP for transport (Kumar, column 14 lines 28-50, column 15 lines 21-35; Box, Abstract, Section 6. Using SOAP in HTTP).

19. Regarding claim 20, Box disclosed a platform wherein the default protocol is SOAP (Abstract, Section 1. Introduction, Section 5. SOAP Encoding, Section 6. Using SOAP in HTTP).

20. Regarding claim 21, Box disclosed a platform wherein an identifier of the encoding object is included in a Universal Resource Locator (URL) [URI], and the URL [URI] is sent to the second messaging platform in combination with the document in the predetermined format (page 8 section 4.2 SOAP Header subsection 1, page 8-9 section 4.2.1 Use of Header Attributes, 4.2.2 SOAP actor Attribute).

21. Since all the limitations of the claimed invention were disclosed by the combination of Kumar and Box, claims 13-21 are rejected.

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22. Claims 22-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ankireddipally et al. (U.S. Patent Number 6,772,216), hereinafter referred to as Ankireddipally, in view of Young (U.S. Patent Number 6,560,606).

23. Regarding claim 22, Ankireddipally disclosed an apparatus comprising: logic instructions operable to receive a service request from a sender, wherein the service request invokes a service component and provides parameters required by the service component (Figures 1-2, column 11 lines 24-10, column 18 lines 9-23); determine whether the service component invoked by the service request is available (column 14 lines 13-25); determine the parameters in the service request that are required by the service component (Figures 2-3, column 14 lines 43-67); create a request document that includes the parameters required by the service component based on at least some of the parameters in the service request (column 15 lines 12-32); create an object upon receipt of the service request (Abstract, Figure 1, column 15 lines 12-32); and transmit the object and the request document to a system hosting the service component (column 15 lines 12-32, column 18 lines 10-23).

24. Ankireddipally taught the invention substantially as claimed. However, Ankireddipally did not expressly teach an apparatus having logic instructions operable to create an *encoder* object upon receipt of the service request *wherein the encoder object identifies a handler that translates the request document to a document format required by the service component*; and transmit the *encoder* object and the request document to a system hosting the service component.

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25. Ankireddipally suggested exploration of art and/or provided a reason to modify the apparatus of Ankireddipally with the encoder object feature (column 17 lines 23-30, column 18 lines 9-23, column 26 lines 9-17).

26. Young disclosed an apparatus having logic instructions operable to create an *encoder* object upon receipt of the service request *wherein the encoder object identifies a handler that translates the request document to a document format required by the service component*; and transmit the *encoder* object and the request document to a system hosting the service component (Figure 1B, column 6 lines 46-67).

27. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the apparatus of Ankireddipally with the teachings of Young to include the encoder object feature in order to support error detection and/or authentication (Young, column 6 lines 46-61).

28. Regarding claim 23, Ankireddipally disclosed an apparatus further comprising: logic instruction operable to invoke the service component using the second document; receive a response from the service component in the document format required by the service component; convert the response to a response message in a platform-independent format; provide the response message to a message platform; convert the response message to a format required by the sender (Abstract, column 14 line 43-column 15 line 11).

29. Regarding claim 24, Ankireddipally disclosed an apparatus wherein the encoding object is included in a Universal Resource Locator (URL) (column 17 lines 23-30, column 20 line 42-column 21 line 14).

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30. Regarding claim 25, Ankireddipally disclosed an apparatus further comprising: logic instructions operable to create a connection information file that identifies an external host on which the service component resides (column 14 lines 14-25, column 20 lines 28-48).

31. Regarding claim 26, Ankireddipally disclosed an apparatus wherein the connection information file further identifies a port on which the service component resides (column 13 lines 30-48).

32. Regarding claim 27, Ankireddipally disclosed an apparatus wherein the connection information file further identifies a transport mode and a handler that is operable to create the second document (column 13 lines 49-60, column 14 lines 53-64, column 15 lines 12-24).

33. Regarding claim 28, Ankireddipally and Young disclosed an apparatus further comprising: logic instructions operable to generate a Graphical User Interface (GUI) to identify and store address of external host computers on which service components that can be invoked by the sender reside (Ankireddipally, Figure 1, column 2 lines 23-44, column 14 lines 13-25; Young, column 3 lines 49-63).

34. Regarding claim 29, Ankireddipally disclosed an apparatus further comprising: logic instructions operable to generate a repository of information regarding the service component, wherein the repository includes at least one of the group consisting of an identifier, a classification dependencies and version of the service component (column 15 line 59-column 16 line 10, column 16 lines 50-67)

35. Regarding claim 30, Ankireddipally disclosed an apparatus wherein the repository includes a component data section and a shared data section, and the

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shared data section includes information that can be shared between service components and changed dynamically at runtime (column 6 lines 46-55, column 7 lines 1-17, column 15 lines 24-36).

36. Regarding claim 31, Young disclosed an apparatus further comprising: logic instructions operable to create a catalog of components in the repository, wherein the catalog can be accessed by authorized users (column 6 lines 46-61).

37. Regarding claim 32, Ankireddipally disclosed an apparatus further comprising: logic instructions operable to generate instructions to specify remote interfaces and provide an interface for writing remote objects (column 5 lines 64-column 6 lines 14, column 14 lines 53-67).

38. Regarding claim 33, Ankireddipally disclosed an apparatus further comprising: logic instructions operable to map relationships between objects in the service components (column 12 line 64-column 13 line 6).

39. Regarding claim 34, Ankireddipally disclosed an apparatus further comprising: logic instructions operable to implement a transaction protocol to coordinate transactions from disparate systems communicated via different protocols (column 15 lines 44-57, column 20 line 52-column 21 line 13).

40. Regarding claim 35, Ankireddipally disclosed an apparatus further comprising: logic instructions operable to select an alternate service component when the service component invoked by the service request is not available (column 14 lines 13-25).

41. Regarding claim 36, Ankireddipally disclosed an apparatus wherein further comprising: logic instructions operable to select the alternate servile component based

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on at least one factor of the group consisting of queue depth, average compute time, and network latency (column 14 lines 13-25, column 18 lines 50-57).

42. Since all the limitations of the claimed invention were disclosed by the combination of Ankireddipally and Young, claims 22-36 are rejected.

Response to Arguments

43. Applicant's arguments filed 10/14/2004 have been fully considered but they are not persuasive.

44. In response to applicant's argument that "there would be no reasonable expectation of success in combining the teachings of Kumar and Box because the Simple Object Access Protocol (SOAP) disclosed by Box is an XML based protocol that consists of four parts: an envelope that defines a framework for describing what is in a message and how to process it, a set of encoding rules for expressing instances of application-defined data types, a convention for representing remote procedure calls and responses and a binding convention for exchanging messages using an underlying protocol" and "A SOAP message is an XML-document that consists of a mandatory SOAP envelope, an optional SOAP Header, Mandatory SOAP Body. Notably, a SOAP message MUST NOT contain a Document Type Declaration (DTD)". The Examiner respectfully disagrees. Although Box did disclose that "A SOAP message MUST NOT contain a Document Type Declaration" (page 3 section 3), Box also disclosed "With the exception of the SOAP mustUnderstand attribute and the SOAP actor attribute, it is generally permissible to have attributes and their values appear in XML instances or alternatively in schemas, with equal effect. That is, declaration in a DTD or schema with a default or fixed value is semantically equivalent to appearance in an instance" (page 6

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section 3. Relation to XML). Thus, the applicant's argument that there would be no reasonable expectation of success in combining the teachings of Kumar and Box is moot in view of Box's teachings.

45. In response to applicant's argument that "The schemas in Kumar are not a schema generator that creates a document according to a predetermined format in response to a request for service", it is submitted that Kumar disclosed

"A protocol layer operatively coupled to the profile objects interface and the profile service interface, the protocol layer defining a plurality of request elements and a plurality of response elements. A protocol layer interface within the protocol layer receives user-entity specified set of request elements from the user entity and sends a responsive set of response elements to the user entity. A first set of methods within the profile service mechanism that create instances of the profile objects, where each of the first set of methods correspond to one of the request elements and one of the response elements" (Abstract)

And

"As shown in FIG. 6, protocol adapter 304 implements the HTTP transport protocol to extract the RequestSet from the HTTP data packet and reformat the RequestSet document as a plurality of request messages. Profile services API 303 accepts the request messages and passes the messages to appropriate profile objects or the profile manager object for execution within core profile service engine 301. Typically a response message will be generated for each request message. Profile service API 303 receives the response message(s) and formats them into mark-up language documents such as an XML ResponseSet document 801 shown in FIG. 8. Like the RequestSet 701, ResponseSet 801 is defined by a data type definition called a ResponseSet. Each ResponseSet includes a plurality of nested elements at least some of which correspond to formatted response messages" (column 15 lines 21-35).

46. Thus, it should be obvious that the document of Kumar is created according to a predetermined format in response to a request message for a service from the Profile services API.

47. As the rejection reads, Examiner asserts that the combination of these teachings render the claimed invention obvious.

Conclusion

48. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

49. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

50. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam (Jenny) Phan whose telephone number is (703) 305-4665. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on 703-308-3873. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William Cuchlinski

SPE

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703-308-3873

tp
March 10, 2005